

REMARKS

In the Outstanding Action, the Examiner rejected claims 1-22. In this amendment, claims 1, 3-6, 8-10 and 13 have been amended and claims 7, 11, 12, 19 have been cancelled. The amendments may be found throughout the specification of the original application. Claims 1-6, 8-10, 13-18, and 20-22 are now pending and submitted for consideration. The following remarks are submitted as a full and complete response to the Outstanding Action.

Section 102 Claim Rejections

The Examiner rejected Claims 1, 3-4, 11-13, 15-16, 19, 21 under 35 U.S.C §102(b) as being anticipated by Roberts, U.S. Patent No. 5,240,420 (Hereinafter Roberts). Note that the following discussions are submitted based on the amended claims.

Claim 1

Roberts disclosed a self-aligning printed circuit connector. Referring to Fig. 4 and col.6, lines 2-6 in Roberts, "The edge connector portion 8 includes recesses 10 which may be used to captively locate the PC board relative to the connector housing 1 by means of pins 11 passing through openings in the housing 1." Further referring to col.6, lines 23-29 in Roberts, "The flexible circuits 14 extend into a cavity 16 of the housing 1 and are located by the pins 12 which engage openings 21A in the flexible circuits 14 so that the areas 15 of the flexible circuits 14 align with the pads of the PC boards 6 when the edge connector portion 8 thereof is inserted into the connector through an edge connector portion receiving aperture 17 of the housing." In other words, the PC board disclosed by Roberts is "inserted" into the connector, and then the "pins" pass through the recesses of connector portion to locate the PC board.

In the present application, claim 1 discloses a first bulge portion corresponding to a third bulge portion. A distance between the first and the third bulge portions is smaller than a thickness of the flexible printed circuit for clamping the flexible printed circuit. Referring to the Fig. 1 and Fig. 2 in Roberts, persons who are skilled in the art understand that the aperture 17 must not be smaller than the PC board to insert the PC board into connector through the aperture 17. Therefore, the B1 and B2 portion, indicated in the Examiner's attachment, cannot provide the clamping force to the PC board since the aperture must be larger than, or at least equal to, the PC board. In contrast to the present application, the connector disclosed by Roberts requires

additional pins passing through the recesses of connector portion to locate the PC board. Thus, Roberts fails to disclose a first bulge portion that corresponds to a third bulge portion and a distance between the first and the third bulge portions smaller than a thickness of the flexible printed circuit for clamping the flexible printed circuit.

Further, claim 1 discloses a second bulge portion corresponding to the fourth bulge portion for electrically coupling to the flexible printed circuit. And the second bulge portion further includes a first sloping surface for guiding the flexible printed circuit in the present application. Contrarily, Robert fails to disclose a second bulge portion including a first sloping surface for guiding the flexible printed circuit.

Accordingly, Applicants submit that the amended claim 1 satisfies the patentability requirement and is allowable.

Claims 2-6 and 8-10 respectively depend directly or indirectly on an allowable claim 1 and include further features. Therefore the above claims should be allowable.

Claim 13

Claim 13 discloses a first bulge portion corresponding to the third bulge portion. A distance between the first and the third bulge portions is smaller than a thickness of the flat flex cable for clamping the flat flex cable. Further, claim 13 discloses a second bulge portion corresponding to the fourth bulge portion for electrically coupling to the flat flex cable. And the second bulge portion further includes a first sloping surface for guiding the flat flex cable. According to the above discussion, Roberts fails to disclose that a first bulge portion corresponds to a third bulge portion and a distance between the first and the third bulge portions smaller than a thickness of the flat flex cable for clamping the flat flex cable. Robert also fails to disclose a second bulge portion including a first sloping surface for guiding the flexible printed circuit.

Accordingly, Applicants submit that the amended claim 13 satisfies the patentability requirement and is allowable.

Claims 14-18 and 20-22 respectively depend directly or indirectly on an allowable claim 13 and include further features. Therefore the above claims should be allowable.

Section 103 Claim Rejections

The Examiner rejected claims 2, 8, 10, 14, 20, and 22 under 35 U.S.C §103(a) as being unpatentable over Roberts.

Based on the above discussion, claims 2, 8, 10-14, 20, and 22 respectively depend directly or indirectly on allowable claims 1 and 13 and include further features. Therefore the above claims should be allowable.

The Examiner rejected claims 5-6 and 17-18 under 35 U.S.C §103(a) as being unpatentable over Roberts in view of Takeuchi, US 6,575,769 (Hereinafter Takeuchi).

Takeuchi discloses a molded connector comprising an electrically insulating body, and at least one contact element provided in the electrically insulating body. However, Takeuchi fails to disclose a first bulge portion that corresponds to a third bulge portion and a distance between the first and the third bulge portions smaller than a thickness of the flat flex cable for clamping the flat flex cable. Takeuchi also fails to disclose a second bulge portion including a first sloping surface for guiding the flexible printed circuit.


Accordingly, claims 5-6 and 17-18 respectively depend directly or indirectly on allowable claims 1 and 13 and include further features. Therefore the above claims should be allowable.

CONCLUSION

In light of the above amendments and remarks, Applicants respectfully submit that all pending claims 1-6, 8-10, 13-18, and 20-22 are in condition for allowance, and respectfully request the withdrawal of the rejections. Accordingly, a Notice of Allowance is respectfully requested.

Respectfully submitted,

Date: 8/29/05

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